Restoration Began With Reseeding

City of Wylie Working with Naturalists to Preserve Blackland Prairie

by Judy Truesdell

Texas Master Naturalist Dave Powell harvests seed from native prairie grasses.

The Blackland Prairie, a 12-million-acre stretch of dark, rich soil that reached from the Red River on the north to San Antonio on the south, was once part of an extensive and complex ecosystem, home to 50 million bison, an array of wildlife including rabbits, moles, lizards, turtles and hundreds of species of birds. The fertile soil that supported the prairie attracted settlers who farmed the fertile soil and destroyed the prairie. Less than one percent of the prairie remains, making it one of the most endangered ecosystems in North America.

The City of Wylie Municipal Complex is located on a small piece of this treasured prairie. Wylie city officials and local naturalists feel it is important to keep an eye to the past and a connection to nature. The Wylie Park and Recreation Division has partnered with the Blackland Prairie Chapter of the Texas Master Naturalists to begin the restoration process of approximately 22 acres of the property to its natural condition.

Overseeing the project is Dave Powell, a certified trail guide and contract educator at the Heard Natural Science Museum & Wildlife Sanctuary in McKinney and immediate past president of the local naturalists chapter. In spring of 2012, following Wylie City Council's approval of the project, Powell and his volunteers immediately got to work, scattering 10 pounds of grass seed, purchased by the city. "We're trying to play nature and do as much as we can without machines," he said. They started to see results in fall of 2013, when native plants such as sideoats grama, the state grass of Texas, began to take hold. "We were surprised. This was more progress than we anticipated," Powell said, noting that the fall would have been a more ideal time to plant.

Prairie restoration is a long and challenging process with many steps. Volunteers continue to remove invasive and imported plants, such as Johnson grass, King Ranch bluestem, Bermuda grass and woody plants, while replacing them with native prairie grasses, such as big bluestem, buffalo grass, little bluestem and switchgrass.

Powell said seeds from native plants found on the property have a better success rate. To collect seeds, paper bags are put over the drying seed heads that are gently shaken. "If the seeds come off, they were ready to be harvested," Powell explained. Other naturalist groups also contribute seeds to the restoration project from nearby fields.

Using soil from the Wylie complex, Powell grew about 100 plants from native seed, planting them in biodegradable paper towel tubes and growing them on his home patio. "I wanted to see how the young sprouts look so I can identify them when they begin to pop up in the prairie," he said. The tubes were planted in test plots and marked with red flags.

Once mowing ceased on the redeveloping prairie, the growth of invasive grasses slowed and a good scattering of wildflowers emerged, including blue stem, Indian paintbrush and primrose. Powell is excited about the appearance of green milkweed, which attracts monarch butterflies – larvae feed off of the milkweed when adults lay their eggs on the

Milkweed attracts monarch butterflies.

Primrose blooms are making a comeback.

plants. “Monarchs need milkweed for energy for their migration,” Powell said. “They will travel 4,000 miles to one habitat in Mexico.”

Although the process is slow, other signs of restoration are visible. “We’re starting to see more little animals, more rodent trails. They’ve found safe places to make their homes, among the bunch grasses. They’re part of the natural cycle – coyotes roam the prairies, as well as bob cats, armadillos – hawks are looking for rodents, which helps control that population. We hope to see some grass snakes, good little snakes that eat rodents. It’s all part of maintaining the life cycle.”

Powell said patience is key. “I come out two times a week for about three hours. For the first hour and a half, I cut stuff down, then I step back; my job is to observe, to see what’s there. I walk around, see what plants have grown up, take some pictures. Every month or so, I send an email to the naturalists group and tell them what new plants I see growing. One of them said, ‘You sound like a proud papa.’ That’s how I feel. We’re watching and waiting; letting nature take its course.”

The next time you drive past Country Club and West Brown, remember that prairie restoration is a work in progress – and it takes time.

“I will never see the full grass prairie. I’m 70 years old, and sure, it will be better, but it won’t return to its natural state for 50 years.” •

Photos courtesy of Carmen Powlen and Dave Powell.

Volunteers have created a half-mile natural trail near the library. Later this year, it will be paved and join the new mile-long walking trail.

Insects are crucial to continuing the natural life cycle in the prairie, and volunteers are beginning to see an increase in insect life among the flowering plants.